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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,255	12/21/2001	Kazumasa Kimura	85A 3183	7870

7590

03/24/2004

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LOS ANGELES, CA 90067-3024

EXAMINER

RAO, SHEELA S

ART UNIT	PAPER NUMBER
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2125

DATE MAILED: 03/24/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

10/026,255

Applicant(s)

KIMURA ET AL.

Examiner

Sheela Rao

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2001.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-10 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 21 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-10 are presented for examination.
2. Receipt is acknowledged of papers submitted, December 21, 2001, under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

3. Applicant is advised to consider revising the disclosure of the instant invention with regard to the specific components of the figures and the respective figures in which they are found. For example on page 6 of the specification, component 45 is described at many instances but page 6 is a description of figure 4. Nowhere in figure 4 is part 45 shown. Stating and describing items with corresponding figures would yield clearer comprehension. Examiner is NOT objecting to the disclosure of the instant invention, only suggesting revision for the sake of clear and complete understandability.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakayama (USPN 5,483,626) in view of Kinnaird (USPN 6,564,115 B1).

Nakayama discloses a graphic transforming apparatus and method for its use. The invention of the prior art uses a computer system that comprises object and/or pattern acquiring means from a library of stored data images. Portions of these graphic objects or patterns, obtained from the data library, are then used to be redrawn into objects as per set requirements. The use of a computer system (Figure 2) incorporates a display screen or an image drawing means (col.3: lines 43-45), a pointer/cursor or handle

display means (col. 3: line 41), a mouse or manipulating input means (col. 3: line 36), the combination of the pointer and mouse enables a redrawing means (col. 3: lines 1-15), and the pattern menu area that includes a library or the parameter calculation/value display means (col. 3: lines 53-55), a keyboard or parameter value input means (col. 3: line 31). The calculations and decision making factors for determining if the correct data has been used and reworked, similar to the judgement means, are accomplished by the control unit of the CPU as depicted in Figures 7 and 11 (col. 5: lines 5-46). In the event of an error or miscalculation or out-of-range output means, an error is displayed to prompt the operator (col. 5: lines 41-45, Fig. 11). As for the data setting device and operating parameters of the instant invention, Nakayama teaches the claimed limitations. However, the environment of the instant invention, wire bonding data and device, is not taught by the prior art of reference.

For this reason, the patented reference to Kinnaird is relied upon. The invention of Kinnaird discloses the use of an automated system and method for bonding and testing of wire connections in an integrated circuit chip. Kinnaird uses a computer-controlled device to automatically adjusting bonding parameters. The system includes a bonding parameter storage means, a visual subsystem, along with positioning commands and measurements to operate the bonding tool upon an XY table. Kinnaird further uses the automated system for testing purposes so as to make a more efficient system with minimal errors. See Figure 1. The testing means of the patented invention automatically converts the testing data into bonding parameters (col. 2: lines 49-50). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the graphical transforming apparatus and method of Nakayama with the automated wire bonding means of Kinnaird to introduce assembly concepts that are flexible and easy; yielding a more automated effective and efficient wire bonding apparatus and method therefore.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheela Rao whose telephone number is (703) 305-9766. The examiner can normally be reached Tuesday - Thursday from 9:00 am to 3:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard, can be reached on (703) 308-0538.

Any response to this action should be mailed to:

**Commissioner of Patents and Trademarks
Washington, D.C. 20231**


or faxed to:

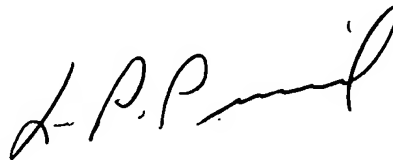
(703) 872-9306 for Official Communications

hand-delivered responses should be brought to:

**Receptionist - Sixth Floor
Crystal Park II, 2121 Crystal Drive, Arlington, Virginia**

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.


Sheela S. Rao
March 18, 2004



**LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100**